

Statewide GPS/GIS Project Newsletter

January 25, 2001

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Lesson Plan Submittals

Lesson plans can be submitted on line at: <http://web.ead.anl.gov/mapprojects/projects/plans.cfm> Or you can follow the links from the web site <http://web.ead.anl.gov/mapprojects> by clicking the “Projects” button and then clicking the “Lesson Plans” link. Please go to this site and type your information directly into the browser page and then click the “Submit” button at the bottom to add it to the lesson plan list.

Currently there are 20 lesson plans from Bill Nipper and Vicki Page in the Glaciers project. An example is shown in the following figure. You can view any of these lesson plans. Editing and searching features are being worked on.

The screenshot shows a web form titled "GPS/ GIS Lesson Plan". It contains several sections for data entry:

- Teacher's Name:** A text box containing "Vicki Page".
- Teacher's e-mail:** A text box containing "vpage@ewing.milink12.il.us".
- Grade Level(s):** A grid of checkboxes for grades K through 12, and an "Other" option. Grade 8 is selected.
- Subject Area(s):** A grid of checkboxes for Language Arts, Social Studies, Math, Fine Arts, and Science. Math is selected.
- Theme/ Unit Title:** A text box containing "Glaciers (Part 1)".
- U.S. Application of Learning:** A grid of checkboxes for Solving Problems, Communicating, Using Technology, Working on Teams, and Making Connections. Solving Problems, Communicating, and Using Technology are selected.
- Technology Utilization:** A grid of checkboxes for Word Processors, Spreadsheets, Database, e-Communication, Multimedia Presentations, Web Searches, Imaging (e.g. cameras, scanners), and Other (List below). Word Processors, Spreadsheets, Multimedia Presentations, and Other are selected.
- Student Artifacts:** A grid of checkboxes for Written Report, Notebooks/Journals, Debates, Posters, Models (physical or graphical), Classroom Presentation, Multimedia (e.g. PowerPoint), and Web Pages. Notebooks/Journals, Classroom Presentation, and Multimedia are selected.

Review of ANL Workshop

The ANL workshop was held on Dec 8 & 9. About 50 participants braved the cold near Chicago to learn about using GPS and GIS tools. The web site contains both the workshop presentations and maps of the hands-on GPS activities.

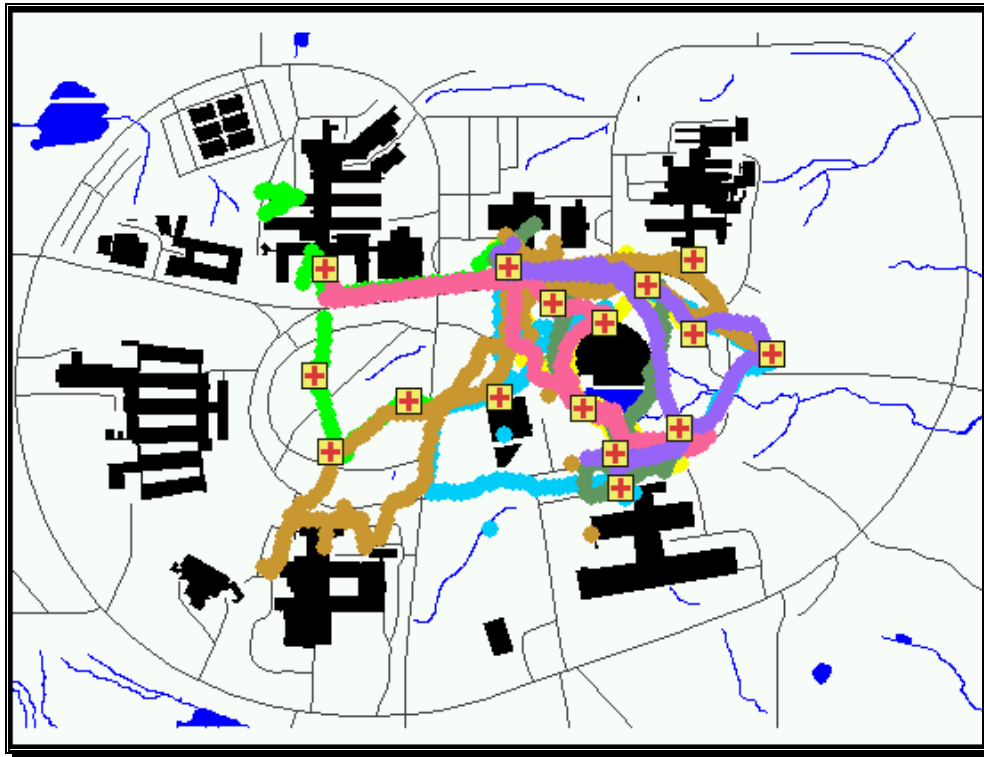
The GPS and GIS presentations can be found on the web site at: <http://web.ead.anl.gov/mapprojects/communication/presentations.cfm> .

Or you can follow the links from the web site <http://web.ead.anl.gov/mapprojects> by clicking the "Communication" button and then clicking the "Presentations" link. The presentations are in three formats. The "On-Line" presentation only works in Internet Explorer browsers. The "PDF" requires that the Adobe Acrobat Reader is installed. The full PowerPoint files can also be downloaded for use or editing.

Maps of the hands-on GPS activities can be found at: <http://web.ead.anl.gov/mapprojects/projects/anl/index.cfm> Or you can follow the links from the web site <http://web.ead.anl.gov/mapprojects> by clicking the "Projects" button and then clicking the "ANL Workshop" link at the bottom of the table. There are two types of maps with the data from the GPS tracking.

The workshop participants worked with Magellan GPS 315 handheld units. Each of the seven groups had one unit, and each unit was pre-loaded with the coordinates of a subset of sixteen landmarks sprinkled around the inner circle area of Argonne National Laboratory. It was the mission of each group, using only the unit, to find their landmarks, document what they were, and return to Building 223, which is where they started. Each of the 315 units were configured to automatically store track points as the groups walked. Once the groups returned, the resulting track points were downloaded from the unit, and uploaded into a database for mapping purposes.

The [MaD map](#) of these data provides a zoomable, pannable and clickable view of each of the seven group tracks. This will take a few minutes to load, depending on the internet connection speed. This map also shows landmark icons. The MaD map provides various tools that can be used to interact with the map, including a pan tool, zoom tool, a distance measurement tool, and a tool that, when selected, allows landmark icons to be "clicked" and the user taken to a page that describes the landmark.

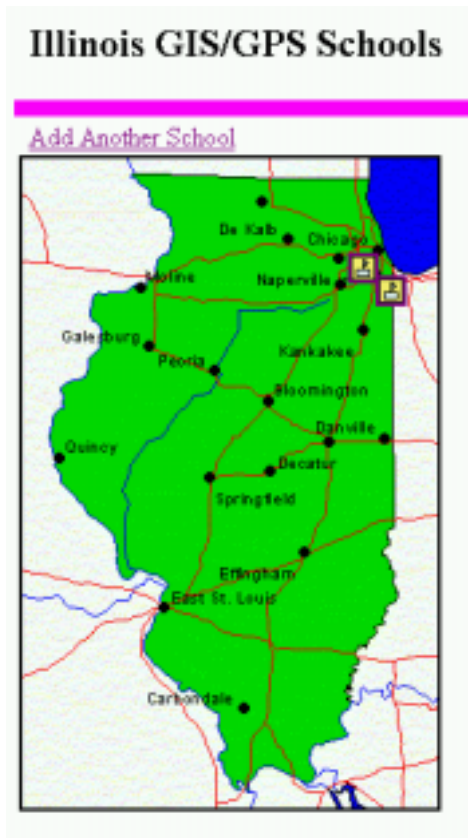


There is also an [animated map](#) of each of the tracks. To work correctly, this requires the most recent versions of either Netscape or Microsoft browsers. Although this map is not "zoomable", the landmark icons are clickable.



Demo Map Site

There is a new type of interactive Internet map that is being tried out for use in some projects. A demo site has been created for the participants to try out this possibility. The tools used in the site require Internet Explorer or the latest Netscape 6.0 browser. A test site has been set up (<http://web.ead.anl.gov/mapprojects/maps/example/test.cfm>) to determine if your browser supports the tools. If you see a “smiley face” in the preceding link then the maps will work. The demo site is accessible from the link above or directly at <http://web.ead.anl.gov/mapprojects/maps/example/index.cfm>, or by using the link on the “Projects” page.



On the demo site, you will see a map of Illinois with small yellow icons for each school submitted so far. By clicking on these icons, a new web browser with more detailed information will appear. If the school is near Chicago, a detailed map of Chicago will appear with the school icons.

If you would like to add your school to the map (please do), click on the “Add Another School” link just above the map. Please use the password “ilgps01” and fill in the other fields. You will need the latitude and longitude of your school. To get this you can use your GPS unit or find your school on the Topozone web site (<http://www.topozone.com>). The picture can be specified by clicking on the “Browse” button and then selecting a file containing the picture of your school. Click on the “Submit” button at the bottom to send the data to the web site. If the coordinates were outside the map area, a message will appear indicating the correct range for the value. (Both latitude and longitude should be positive values). After the data is loaded, the map

pages returns with the new point showing. You can test your information by clicking on the new icon.

Web Site at ANL

The ANL web site to support the projects is at <http://web.ead.anl.gov/mapprojects> .



This site has areas for developing **communication** through listservs, on-line presentations, shared files, web conferencing, and web videos. The presentation section currently has the GIS and GPS presentations from the workshop. There is a listserv setup for all the participants and for each project. Please contact Dave LePoire (dlepoire@anl.gov) if you would like to learn

more information about using these tools.

The **links** section of the site contains valuable resources about what other people have done with GPS, GIS, and integration into school curricula. One of the main GIS sites is the ESRI site (<http://www.esri.com>). You will also find interesting free tools and data at the various sites.

The **projects** section contains links to lesson plans, project maps and project web sites.

- **Lesson plans** can be viewed and submitted. An edit and search capability is currently being worked on.
- For each project, there is a link to a **project web site**. For most projects this link just has a place holder. For the “Illinois” and “Glaciers” sites there is a draft version of the internet mapping capability they would like to use. Projects can upload locally generated web pages onto this site also. Please contact us for more information.
- For each district, there is a link to the districts **MaD browser map page**. This map contains layers of geographic data for the district. This map can become a base for school or project specific data.
- At the bottom of the table is the link to the **ANL Workshop Web Site** that contains links to the GPS data on tracks and accuracy.

Cool GIS Web Site

Nancy Gorny reported finding a site that is asking for participants in the “Confluence Project” (<http://www.confluence.org/>) . As it states:

“The goal of the project is to visit each of the latitude and longitude integer degree intersections in the world, and to take pictures at each location. The pictures and stories will then be posted here.”



Contact us

Please feel free to contact us concerning mapping needs, web site set up, communication tools, GPS/GIS tools, or other related issues. This newsletter is available on the web site from the “Communication” button under “News” or at: <http://web.ead.anl.gov/mapprojects/communication/JanNewsletter.pdf> .

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